

REPORT

OF

THE SECRETARY OF WAR,

SHOWING WHAT

PROGRESS HAS BEEN MADE

IN

DEEPENING AND CLEARING THE CHANNEL,

AT A PLACE CALLED

THE GRAND CHAIN.

MAY 22, 1828.

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1828.

THE CONGRESS
IN SESSION

REPORT

THE HOUSE OF REPRESENTATIVES

COMMITTEE ON THE SELECT COMMITTEE

THE GRANT

WILLIAM

DEPARTMENT OF WAR,

May 22, 1828.

SIR: In compliance with a resolution of the Senate, of the 16th instant, directing the Secretary of War to inform the Senate what progress has been made in clearing out and deepening the channel of the Ohio, at a place usually called the Grand Chain, and for which an appropriation of thirty thousand dollars was heretofore made, I have the honor to present herewith, the report of the Chief Engineer, of this date, which contains the information called for by the resolution above stated.

I have the honor to be, Sir,

Very respectfully, your ob't serv't,

JAMES BARBOUR.

Hon. SAMUEL SMITH,

President of the Senate.

1820

ENGINEER DEPARTMENT,

Washington, May 22, 1828.

SIR: In obedience to your directions to furnish the information called for by the resolution of the Senate, of the 16th instant, directing the Secretary of War to inform the Senate what progress has been made in clearing out and deepening the channel of the Ohio, at a place usually called the Grand Chain, and for which an appropriation of thirty thousand dollars was heretofore made, I have the honor to report, that immediately after the passage of the act making the appropriation above stated, the Department, desirous of availing itself of the experience in navigating the Ohio river, and knowledge of the obstructions to that navigation, possessed by Captain Henry M. Shreve, Superintendent, under the act of Congress, passed the 24th of May, 1824, appropriating the sum of \$75,000, for the purpose of removing all snags, planters, and sawyers, and other obstructions of that description, directed him to furnish his opinion as to the mode most likely to fulfil the intentions of Congress, as set forth in the law, and especially as to that part of the river usually called the Grand Chain, near its mouth; and if necessary, to visit, and examine the position of the rocks, and to ascertain the direction which the channel ought to take to admit steam-boats to pass and repass in safety, the obstructions at the Grand Chain, at the lowest stage of the water. In pursuance of those instructions, Mr. Shreve made a communication to the Department, a copy of which accompanies this report.

It being impracticable for Captain Shreve to act with effect as superintendent under the law of 1824, and that of 1827, Mr. Wm. Courtney, a respectable gentleman highly recommended for his experience in such matters, was appointed, in May last, Agent for carrying into effect the provisions of the act appropriating \$30,000 for improving the navigation of the Ohio river, approved March 3d, 1827. During the last year, the operations on the Ohio river, under the agency of Mr. Courtney, have progressed as far as Gallipolis on said river, and it is expected that in the course of the current year, the intentions of Congress in the law above-mentioned, will be accomplished, so far as the appropriation made for that purpose will allow. The Grand Chain being near the mouth of the river, and the plans of operations having been to commence at Pittsburg and progress down the river, the part in which the Grand Chain is situated, will necessarily be the last operated on, unless circumstances should render it more favorable to take it in hand as soon as the waters may allow, instructions to which effect will be given to the Superintendent. Mr. Courtney has

already been furnished with the views and opinions of Mr. Shreve, on the subject, and there is every reason to believe that no difficulty will be found in clearing the obstructions at the Grand Chain.

I have the honor to be, Sir,

With great respect, your ob't serv't,

ALEXANDER MACOMB,

Maj. Gen. Chief Eng.

HON. JAMES BARBOUR,

Secretary of War.

LOUISVILLE, 26th April, 1827.

SIR: I have received your letter, under date of the 28th March, calling on me to give my opinion relative to the improvement of the Ohio river, and more particularly the Grand Chain, near its mouth, to visit and examine the same, which, I beg leave to inform you, cannot be done earlier than the month of July, as the rocks will not show above water previous to that time, at which I will visit and make a careful inspection of it, and lose no time in reporting the results to the Department.

The other parts of the Ohio river being extended over a distance of about nine hundred miles, will require some time for reflection; and some parts of it must be examined before a correct statement of the obstructions could be furnished. I will therefore confine my present observations on the obstructions at the Grand Chain only. From my intimate acquaintance with the river, and particularly with the above point, I am enabled to furnish you with a rough sketch of it, which I believe to be very nearly correct, and I herewith transmit the same. The line on the sketch marked A, is the track to which steam-boats are confined at present, and in some places the boats must pass within a very few feet of the largest rocks. To make the navigation safe at this place, it will be necessary to remove all the rocks situated on the sketch between the two red lines, which will make a channel of about five hundred feet wide. I would also recommend that a buoy be placed at the head of the Rock Bar which is situated nearly opposite the two houses on the Illinois shore, and which is marked B on the sketch; this buoy will also serve as a guide to the navigator for entering the head of the channel.

In regard to the best manner of removing the above obstructions, whether by contract or the reverse, I am scarcely able to answer. This work being of such a nature that it would be almost impossible for either the contracting party or the government to make any thing like a proper estimate of the expense of executing it, as a large proportion of the rocks will, at all times, be below the surface of the water. If I may at all hazard an opinion upon this subject, it would be, that, in order to ensure the effectual removal of said obstructions, it would

be advisable to have it done by the government, under the direction and superintendence of a person well acquainted with the situation and extent of the obstructions. The Chain is about two miles long, extending from fort Wilkinson down to the Cedar tree, marked on the sketch. The proper time to commence operations on this part of the river, would be about the 1st of August; and the necessary preparations for carrying on the work, will be four twin flat-boats, with machinery to raise and carry off the rocks; sledges, crow-bars, blacksmith tools to keep the drills in order; drills for drilling rock, powder, boxes of tin, otherwise canisters ready made for blasting under water, three flat-boats for quarters and store rooms, and subsistence, the whole sufficient to work from sixty to one hundred men. At a rough calculation, I think the work, when completed, will cost from eighteen to twenty thousand dollars; and the above preparation may be made in forty days. The time it will take to finish the work, is very uncertain, as at that season of the year we may expect more or less sickness among the workmen; but I am confident the work may be completed during the second season after commencement.

Very respectfully, &c.

(Signed)

HENRY M. SHREVE,

Superintendent, &c.

HON. JAMES BARBOUR,

Secretary of War.

